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WHAT IS CLAIMED IS:

- 1. An isolated nucleic acid comprising a nucleotide sequence encoding any of the amino acid sequences selected from the group consisting of SEQ ID NOs:2, 4 and 6, or the full complement thereof.
- 2. An isolated nucleic acid comprising a nucleotide sequence that hybridizes under high stringency conditions over substantially the entire length of any isolated nucleic acid encoding an amino acid sequence selected from the group consisting of SEQ ID NOs:2, 4 and 6, or the full complement thereof.
- 3. An isolated nucleic acid comprising a nucleic acid sequence having at least 70% identity over at least one sequence window of 48 nucleotides with any isolated nucleic acid encoding an amino acid sequence selected from the group consisting of SEQ ID NOs:2, 4 and 6, or the full complement thereof.
 - 4. The isolated nucleic acid of one of claims 1, 2 or 3, wherein the sequence of CaKRE5 is as set forth in SEQ ID NO:1.
 - 5. The isolated nucleic acid of one of claims 1, 2 or 3, wherein the sequence of CaALR1 is as set forth in SEQ ID NO:3.
- 6. The isolated nucleic acid of one of claims 1, 2 or 3, wherein the sequence of CaCDC24 is as set forth in SEQ ID NO:5.
 - 7. A method of selecting a compound that modulates the activity of a protein encoded by the *CaKRE5* of claim 1, 2, 3 or 4 comprising:
 - a) incubating a candidate compound with said protein; and
- 30 b) determining the activity of said protein in the presence of said candidate compound,

wherein a potential drug is selected when the activity of said protein in the presence of said candidate compound is measurably different than in the absence thereof.

- 8. A method of selecting a compound that modulates the activity of a protein encoded by the *CaALR1* of claim 1, 2, 3 or 5 comprising:
 - a) incubating a candidate compound with said protein; and
 - b) determining the activity of said protein in the presence of said candidate compound,
- wherein a potential drug is selected when the activity of said protein in the presence of said candidate compound is measurably different than in the absence thereof.
- 9. A method of selecting a compound that modulates the activity of a protein encoded by the *CaCDC24* of claim 1, 2, 3 or 6 comprising:
 - a) incubating a candidate compound with said protein; and
 - b) determining the activity of said protein in the presence of said candidate compound,
- wherein a potential drug is selected when the activity of said protein in the presence of said candidate compound is measurably different than in the absence thereof.
 - 10. An isolated nucleic acid molecule consisting of 10 to 50 nucleotides which specifically hybridizes to the nucleic acid of claim 1 to 6, wherein said nucleic acid molecule is or is complementary to a nucleotide sequence consisting of at least 10 consecutive nucleotides from said nucleic acid sequence set forth in SEQ ID NOs:1, 3 or 5.
- 11. A method of detecting CaKRE5, CaALR1 or CaCDC24 in .30 a sample comprising:

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- a) contacting said sample with a nucleic acid molecule according to claim 10, under conditions such that hybridization occurs; and
- b) detecting the presence of said molecule bound to said CaKRE5, CaALR1 or CaCDC24 nucleic acid.

12. A purified *CaKRE5* polypeptide or an epitope-bearing portion thereof.

- 13. A purified *CaALR1* polypeptide or an epitope-bearing 10 portion thereof.
 - 14. A purified *CaCDC24* polypeptide or an epitope-bearing portion thereof.
- 15. The purified *CaKRE5* polypeptide according to claim 12, comprising an amino acid sequence at least 35% identical over at least one sequence window of 18 amino acid residues to the amino acid sequence as set forth in SEQ ID NO:2.
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 16. The purified CaALR1 polypeptide according to claim 13, comprising an amino acid sequence at least 35% identical over at least one sequence window of 18 amino acid residues to the amino acid sequence as set forth in SEQ ID NO:4.
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 17. The purified CaCDC24 polypeptide according to claim 14, comprising an amino acid sequence at least 35% identical over at least one sequence window of 18 amino acid residues to the amino acid sequence as set forth in SEQ ID NO:6.
- 30 18. An antibody having specific binding affinity to the polypeptide or epitope-bearing portion thereof according to claim 12, 13 or 14.

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- 19. A method of screening for a compound having antifungal activity through an interaction with a protein selected from CaKRE5, CaALR1 and CaCDC24 comprising:
 - a) incubating a candidate compound with said protein; and
- b) determining one of the activity of said protein or of an assayable or observable property associated with a biological function of said protein in the presence of said candidate compound,

wherein a potential antifungal drug is selected when the activity or assayable or observable property of said protein in the presence of said candidate compound is measurably different than in the absence thereof.

- 20. The method of claim 19, wherein said antifungal activity is effective against a fungi selected from Candida albicans, Aspergillus fumigatus, Aspergillus flavus, Aspergillus niger, Coccidiodes immitis, Cryptococcus neoformans, Exophiala dermatitidis, Histoplsma capsulatum, Dermtophytes spp., Microsporum spp., Tricophyton spp., Phytophthora infestans, and Puccinia sorghi.
- 21. The purified CaKRE5 polypeptide of claim 12, having the amino acid sequence set forth in SEQ ID NO:2.
- 22. The purified CaALR1 polypeptide of claim 13, having the amino acid sequence set forth in SEQ ID NO:4.
- 23. The purified CaCDC24 polypeptide of claim 14, having the amino acid sequence set forth in SEQ ID NO:6.
 - 24. The method of claim 19 or 20, wherein an *in vitro* assay is used.
- 30 25. The method of claim 19 or 20, wherein a cell-based assay is used.